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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/489,517 | 01/21/2000 | John Richard Zavgren JR. | 99-445 | 5940 |

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EXAMINER

FERRIS, DERRICK W

| | |
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| ART UNIT | PAPER NUMBER |
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2663

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DATE MAILED: 08/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/489,517

Applicant(s)

ZAVGREN, JOHN RICHARD

Examiner

Derrick W. Ferris

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 January 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. **Claims 1-36** as amended are still in consideration for this application. Applicant has amended claims 1, 7, 10-14, 20-21, and 23-26.
2. Examiner **withdraws** the 112-first paragraph rejection for Office action filed 4/7/03 in reference to line item 1-2.
3. Examiner does **not withdraw** the obviousness rejection to *Garg et al.* '346 in view of *Robins et al.*, *Garg et al.* '346 in view of *Robins et al.* and in further view of *Feldmann*, and *Garg et al.* '346 in view of *Robins et al.* and in further view of *Lane* for Office action filed 4/7/03.

As to the claims in general applicant has amended the claims to further recite the network operation occurring during the time period using the reconstructed network operation which is supported in applicant's specification on at least page 8, lines 14-20. At issue is the term "network operation". See *Garg et al.* column 3, lines 15-18 and column 4, lines 23-30 for teachings of obtaining a "network operation". Noted in particular is the term "operations of a network" and "operation or performance of the network environment" (i.e., the operating status of the network in reference to column 11, lines 47-48). In particular, applicant attempts to argue the information contained in configuration log 158 (figure 15) and base configuration table 150 (figure 16) with respect to the excerpt from *Garg et al.* at column 12, lines 5-21 (see applicant's remarks filed 7/9/03 at page 14). Examiner notes column 11, lines 28-61 of *Garg et al.* teaches that when new configuration is received from data collection module 30, configuration

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recording control 22 compares the newly recited configuration information for the device with the current configuration information stored for the device in the base configuration table 150. As mentioned previously the network monitor 22 includes data collection monitor 30 that collects information regarding the operation of the network environment [column 4, lines 20-36]. Thus both “pure” configuration data and network operations data are captured [column 11, lines 45-48]. Finally, figures 15 (base configuration log 158) and 16 (base configuration table) contain timestamps for events that occur over time.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1-3, 6-11, 13-16, 19-24, 26-32, and 34-36** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,453,346 to Garg et al. (“*Garg*”) in view of U.S. Patent No. 5,049,873 to Robins et al. (“*Robins*”).

As to **claims 1, 13, and 26**, *Garg* discloses a method for collecting information from at least one network node describing network operation over a period of time (e.g., data collection module 30 shown in figure 2). Included in data collection is collecting data on the network operations. *Garg* also discloses reconstructing, using a reasonable but broad interpretation, the network operation for the time period from the collected information (e.g., analysis module 38 shown in figure 2) [column 5, lines 14-34].

Not clearly disclosed by *Garg* is presenting the reconstructed network operation to an operator. Examiner notes that it would have been obvious to a skilled artisan prior to applicant's invention to present the reconstructed network operation. A motivation being to show a visual representation of what is stored in the network monitor 22. Examiner notes that in general, *Garg* discloses that a network monitor 22 can be a computer system with a video display 20 used to display various information and data to the user of the computer [column 12, lines 23-60]. Thus the information displayed to the user/operator is the information collected by the monitor 22. *Robins* provides further support by showing a motivation of having a switch operator interface 13 with a monitoring node 11 (as shown in figures 1-2) [column 5, lines 20-55].

As both references disclose network communications in general, and more particularly network monitoring of a communications network, examiner notes a motivation to combine the subject matter as a whole for both references.

As to **claims 2-3 and 15-16**, *Garg* discloses collecting data in general through the use of tables as shown in figure 3 as part of the data reduction module 32 (e.g., shown in the table are change log control and rate log control for performance recordation control 42 and base configuration and configuration log control for configuration recordation control 44). Examiner notes that it would have been obvious to a skilled artisan prior to applicant's invention using a reasonable but broad interpretation of the recited claims to include node status information, information regarding messages received and transmitted, link status information, and forwarding tables. Examiner notes that the motivation is that these are part of configuration information in general as is known in the

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art prior to applicant's invention. Examiner notes that *Robins* also provides further support by shown an event log 37, an alarm table 34, topology data 35, and general database information 36 as shown in figure 3.

As to **claims 6-8, 11, 19-21 and 24**, *Garg* discloses updating the configuration log each time a configuration changes where the configuration table 150 can be reconstructed at a previous point in time. Examiner notes that the example presented discloses sorting the information based on time using a reasonable but broad interpretation of the claimed subject matter [column 12, lines 5-22].

As to **claims 9-10 and 22-23**, *Robins* discloses allowing an operation to display detailed information regarding a network operation as well as displaying detailed information regarding a node, link, or message (e.g., shown in figure 2). Thus *Robins* provides a motivation for displaying detailed information regarding a node, link, or message. Examiner notes this is the same information that is stored in configuration tables as disclosed by *Garg* at column 4, lines 20-35. Examiner notes the motivation for combining references is taught in the reasoning for claim 1 above.

As to **claim 14**, in addition to the reasoning behind the rejection for claim 1, *Garg* discloses that a monitoring device has a processor 202; and memory 206,208, and 212 [column 12, lines 23-47].

As to **claim 27**, using a reasonable but broad interpretation of "area" *Garg* discloses all three areas as shown in figure 3. As mentioned in the previous rejection for claim 1, *Robins* provides further support by showing a motivation of having a switch

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operator interface 13 with a monitoring node 11 (as shown in figures 1-2) [column 5, lines 20-55]. Thus *Robins* also provides further motivation for network operations.

As to **claims 28-31 and 35**, in addition to the reasoning used to reject claim 1, figures 5-10 of *Garg* further disclose using time stamps for storing data with respect to node status changes, messages received and transmitted, and link status.

As to **claim 36**, combine the rejections for claims 24 and 6.

As to **claims 32 and 34**, as mentioned in the reasoning for claim 1, *Garg* discloses that a network monitor 22 can be a computer system with a video display 20 used to display various information and data to the user of the computer (i.e., *Garg* discloses an interactive graphical user interface for visualizing a network interface having a plurality of nodes) [column 12, lines 23-60]. Thus the information displayed to the user/operator is the information collected by the monitor 22. *Robins* provides further support by showing a motivation of having a switch operator interface 13 with a monitoring node 11 (as shown in figures 1-2) [column 5, lines 20-55]. Thus examiner notes that it would have been obvious to a skilled artisan prior to applicant's invention to use a network topology diagram configured to display at least some of the nodes and replay controls that permit an operator to control a replay sequence of the network as the network operates over a period of time. Examiner notes support comes from the combined teachings of both references where *Robins* discloses a network topology and *Garg* discloses replay controls (i.e., *Garg* discloses displaying messages transmitted through the network).

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6. **Claims 4-5 and 17-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,453,346 to Garg et al. ("*Garg*") in view of U.S. Patent No. 5,049,873 to Robins et al. ("*Robins*") and in further view of U.S. Patent Application 2002/0021675 to *Feldmann*.

As to **claims 4-5 and 17-18**, *Garg* and *Robins* disclose storing configuration information in general for a network device. Examiner notes that it would have been obvious to include the routing/forwarding tables as part of this configuration. Examiner notes that a motivation for storing such information is for configuration management. *Feldmann* provides further motivation for disclosing routing information being stored and compared.

As both *Garg* and *Robins* disclose network communications in general, and more specifically network monitoring of a communications network, examiner notes a motivation to combine the subject matter as a whole for both references. Examiner notes that *Feldmann* also discloses network communication in general and more specifically collecting configuration information for the purposes of debugging a networking problem thus creating a motivation to combine the subject matter as a whole for all three references.

7. **Claims 12, 25 and 33** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,453,346 to Garg et al. ("*Garg*") in view of U.S. Patent No. 5,049,873 to Robins et al. ("*Robins*") in further view of U.S. Patent 5,437,009 to *Lane*.

As to **claims 12, 25 and 33**, *Garg* in general discloses walking through the monitored system based on time by going either backwards or forwards [column 12, lines

5-22]. Examiner notes that it would have been obvious to a skilled artisan prior to applicant's invention to allow the operator to also fast-forward and rewind the replay operation. Examiner note a motivation is allowing the operator to see events happen as they occur in time which is generally taught by *Garg*. As further motivation, *Lane* discloses ways of searching network information stored such as a forward play and backward play using a reasonable but broad interpretation of the recited claimed subject matter [column 5, lines 1-35].

As both *Garg* and *Robins* disclose network communications in general, and more specifically network monitoring of a communications network, examiner notes a motivation to combine the subject matter as a whole for both references. Examiner notes that *Lane* also discloses network communication in general and more specifically collecting configuration information using the SEAS system for the purposes of debugging a networking problem thus creating a motivation to combine the subject matter as a whole for all three references.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick W. Ferris whose telephone number is (703) 305-4225. The examiner can normally be reached on M-F 9 A.M. - 4:30 P.M. E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (703) 308-5340. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 305-3900.

Derrick W. Ferris
Examiner
Art Unit 2663

DWF 
August 11, 2003


MELVIN MARCELO
PRIMARY EXAMINER